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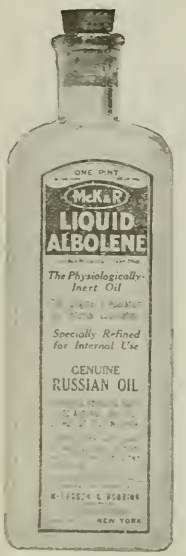

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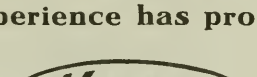

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Current Literature Department

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MEDICINE.

CLINICAL OBSERVATIONS ON THE DIGITALIS-LIKE ACTION OF SQUILL.

WHITE, L. D., ET AL. (*Jour. A. M. A.*, Oct. 9, 1920) draw the following conclusions from their work:

1. The digitalis-like action of squill has been studied in 14 patients with heart disease, complicated by auricular fibrillation in 13 cases and by auricular flutter in one case.

2. The two definite clinical signs of digitalis action are the production of heart block and the lowering of the T-wave of the electrocardiogram.

2. Heart block was produced in this series by the standardized tincture of squill only in large dosage.

4. The T-wave of the electrocardiogram was flattened or inverted by large doses of squill, similarly as by digitalis.

5. No diuresis occurred even with large doses of the standardized tincture of squill, except in two cases of edema after the pulse rate had been reduced and the circulation improved.

6. Toxic symptoms were very rare, even with the largest doses.

7. With the reduction in pulse rate (and diuresis) there was subjective improvement in some of the cases.

8. Finally, the conclusion is justified that squill does have a definite digitalis-like action, but only in larger dose than that now stated as an average, *e. g.*, from 2 to 4 drams (8 to 16 c.c.) instead of 15 minims (1 c.c.) of the tincture at each dose.

BLOOD CONCENTRATION CHANGES IN INFLUENZA, WITH SUGGESTIONS FOR TREATMENT.

UNDERHILL, F. P., AND RINGER, M. (*Jour. A. M. A.*, Dec. 4, 1920) draw the following conclusions from their work:

Pathologically, influenza and acute phosgen poisoning present strikingly similar effects on the respiratory tissue. In each, pulmonary edema is a prominent feature.

In acute phosgen poisoning death is due to a marked change in the concentration of the blood. Extreme blood concentration is incompatible with life.

In influenza, the blood becomes greatly concentrated. This constitutes a factor of the greatest importance in the fatal outcome.

Pathologically and physiologically, then, influenza and acute phosgen poisoning bear striking resemblances.

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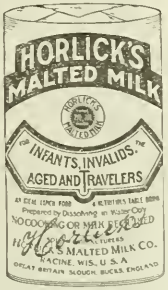

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The Boston Medical and Surgical Journal

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"MEGACOLON."

By W. E. Ladd, M.D., Boston.

The disease with which this paper has to do has been given various titles, among which may be mentioned, "Giant Colon," "Hirschsprung's Disease," "Neuropathic Dilatation and Hypertrophy of the Colon," "Congenital Idiopathic Dilatation of the Colon," and "Megacolon."

Of these, "Hirschsprung's Disease" seems to me to have little to recommend it, Hirschsprung having no claim to priority in discovering the disease, numerous articles having appeared on the subject during sixty odd years prior to his first paper in 1886. Also it is always preferable to adopt a descriptive title when possible. In the light of our present knowledge, "Congenital Idiopathic Dilatation of the Colon" is the most comprehensively descriptive title yet suggested.

"Megacolon," the title which will be used in this paper, is quite satisfactory providing it is not confused with pseudo-megacolon, a disease of the adult. Broadly speaking it may be said that this disease is one of childhood only, though it is possible that occasionally a patient may reach adult life with this condition. Most of the cases, however, reported in the adult do not give a history of dating back to infancy and many have demonstrable mechanical reasons for the dilatation. Such cases have been classified by Finney and others as "Pseudo-Megacolon," and are not considered here.

That the disease is congenital in origin seems well established as several cases have been reported during the first few days after birth and at least one in a seven months foetus. The cause of the disease is still a matter of theretical speculation. Treves believed the dilatation and hypertrophy to be due to actual obstruction. Two objections to this theory occur to me, first, that numerous writers who have reported cases have failed to demonstrate any actual obstruction either at operation or at postmortem examination; secondly, that in my experience, at least, patients suffering from actual obstruction such as imperforate anus, or imperforate anus with small fistulae or congenital ano-rectal stricture do not have megacolon. Hawkins suggests some neuro-muscular defect causing a paralysis of one segment of gut with consequent collection and backing up of feces. Finney believes that his microscopic findings with all muscular and nerve elements present, disprove this theory. But the fact that, in my experience and that of others, the resultant shock from resections of megacolons has been much less than might be expected in an operation of this magnitude or in

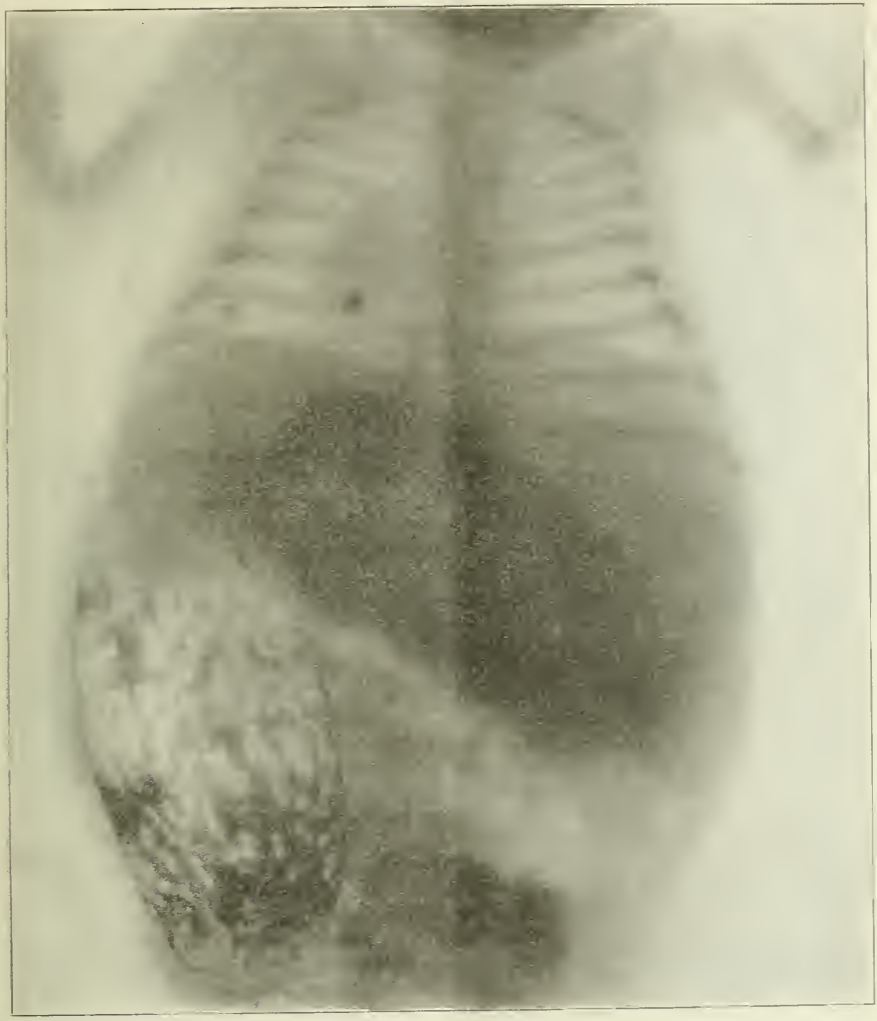
similar operations for other conditions, suggests that Hawkin's theory is worthy of further investigation. Until such investigation throws more light on this subject, the condition may be considered as an anomaly of development.

Pathological findings show an enormously dilated and hypertrophied colon, the affected part beginning and ending abruptly, the sigmoid and descending colon being the portions most commonly involved, though occasionally one sees the whole colon from the rectum to the caecum enlarged. The small bowel is not involved and does not become distended even when the colon has tremendous fecal retention. The mesocolon has been in all my cases unduly long and without the extreme thickening mentioned by others. The intestinal wall of the affected portion is two or three times thicker than that of the unaffected gut. Microscopically, the thickening is shown to be due largely to the hypertrophy of the mucosa and muscular layers with some increase in connective tissue. In cases of long duration, that is, in older children ulcerations of the mucosa and consequent inflammation have been found, this, occasionally even extending to the peritoneum.

Clinically, the story is usually one of constipation from birth or soon afterwards, the most important feature of the constipation being the long periods of time in which there is no bowel movement without evidence of acute obstruction. The periods between defecation having been often several days and occasionally even weeks. Sometimes, however, the bowels may move daily when there is still tremendous fecal retention. This is explained by the liquid part of the feces passing by large masses without dislodging them. In such cases it may take repeated enemata and cathartics to empty a megacolon even when the patient has been apparently suffering from diarrhea. It is common during the course of the disease, when the toxemia or auto-intoxication becomes particularly great, to have periods of vomiting and accentuated abdominal distention. At times the distention may become sufficiently great to encroach on the diaphragm causing dyspnoea or cardiac embarrassment or both. These periodic attacks of vomiting with increased abdominal distention should be taken seriously and measures adopted for their relief as not infrequently the patients die during them.

On physical examination, one finds an emaciated child with a very prominent abdomen, the angle of the costal margins unduly wide and the diaphragm higher than normal; the veins of the abdominal wall dilated and conspicuous; the coils of the dilated colon can be seen and large freely movable masses felt within them. Though peristalsis may be seen at times, it is usually sluggish and often not apparent. In the patients I have seen, the distention has been least in the right upper quadrant and epigastrum and most marked in the left lower quadrant. The skin over the abdomen is stretched and smooth but in other parts of the body, loose and dry, with the complexion sallow and the facial expression inclined to be dull. Add to this picture, the obtaining of copious stools of clay-like consistency and foul odor, by means of enemata and catharsis and one feels confident of megacolon as a correct diagnosis. The diagnosis should always be confirmed by a radiograph of a bismuth clyster. Among other conditions which give rise to a prominent abdomen in children may be mentioned chronic indigestion with constipation, rickets, tubercular peritonitis, and acute obstruction. But the complete picture is quite different in each of these and mistakes in diagnosis should be indeed rare, especially if the x-ray is resorted to when there is doubt.

Having made the diagnosis of megacolon, the question of treatment arises. Upon going to the standard textbooks one finds rather an unusual situation, Keene and other surgeons recommending medical treatment, while in Dunn, Rotch and other medical books, one finds surgery advocated. This suggests what, on more extensive analysis proves to be the case, that no treatment yet discovered is always successful. Medical treatment may be said to be the treatment of constipation. Various diets have been recommended but apparently a diet with a small residue is the most advantageous. Besides diet, active cathartics, mineral oils, enemata of various sorts, massage, electricity, supportive belts and exercises have been tried, and should be tried on all border-line cases and if successful, obviously surgery is not to be recommended. The surgical treatment has likewise been varied. Laparotomy with intra-abdominal manual breaking up of the faecal masses and milking them inside the colon toward the rectum has afforded temporary relief but so temporary that it cannot be recommended. Plication of the enlarged colon has been performed several times with no benefit.



Case 1.—R. S. Radiograph No. 1.

On the theory that tortion of the elongated sigmoid was the causative factor of this disease, fixation of the colon to prevent such tortion has been tried but the results of this operation do not warrant its further performance. Short circuiting operations, that is, anastomosis between the lower ileum or some portion of the colon above the affected part with the lower sigmoid or rectum without excision, have been tried but with results which warrant their being put nowhere but in the discard. The two operations which are worthy of consideration are colostomy and resection of the affected colon with anastomosis between the normal gut above and the lower sigmoid below. Colostomy may be performed for the purpose of drainage to save life during a period of extreme distention, or to allow of irrigation to keep the colon empty and theoretically to allow its contraction or as a preparatory procedure for partial colec-

CASE 2.—E. M.

tomy with anastomosis. This latter operation is the operation of choice and the one which yields the best hope of success. There are one or two points in its technique which I have not found mentioned in the literature, but have learned from bitter experience. The ordinary intestinal clamps one might use for resection of intestine of normal thickness are valueless when applied to the lower segment as they do not have sufficient strength to hold the tremendously thickened intestinal wall. The largest size stomach crushing clamps of Payr are the only instruments I have found which will hold the wall from slipping at the point of amputation. Lateral anastomosis is the best, end to end not being feasible on account of the discrepancy in size between the upper and lower segment. After this has been completed a rectal tube should be introduced through the anus and up through the anastomosis. Failure to do this, I

believe, caused the loss of one of my patients.

My own experience with this disease is limited to five patients which may be briefly summarized.

Case 1. R. S., boy, 2 months old, breast fed. Baby was constipated from birth and abdomen was noticed to be large. Four days prior to admission to the hospital the abdominal distention became much more marked, respiration became embarrassed and the child was referred to me with a diagnosis of *intussusception*.

Examination showed a moderately well nourished baby obviously uncomfortable but not suffering acute pain. The abdomen was tremendously distended but not tender and with the outline of large coils of bowel visible and palpable through the abdominal wall. Rectal examination revealed much feces without blood. A provisional diagnosis of megacolon was made. Enemata was given which brought back an unbelievable quantity of feces and the diagnosis confirmed by x-ray the following day. Three days later the abdomen was opened and a very large hypertrophied colon found, the affection beginning about two inches below the cecum and extending to the rectum (see radiograph No. 1, R. S.). Cecostomy was performed and a tube tied in, the abdominal wound being closed to the tube. Daily irrigations of salt solutions were given both through the colostomy opening and anus and the child improved rapidly, being sent home from the hospital on the eleventh day. The mother continued the treatment at home, but even with these daily irrigations some fecal retention resulted. This, however, she was able to largely overcome by massaging the abdomen at the time of irrigations. At the end of a year the baby was fairly well, weighed seventeen and one-half pounds, took his feedings well, etc., but was a tremendous burden to the mother, with the dressings, irrigations, massage, feedings, and what not. Believing I could better the situation, I performed a lateral anastomosis between the lower ileum and sigmoid. Unfortunately the child developed peritonitis three days later and died. This procedure was, I believe, partly an error in technique but largely bad judgment. It would have been far better to have postponed the second operation until the child was older.

Case 2. E. M., 7-year-old boy. Admitted March 27, 1919. Family history negative. Past History—Whooping cough when very small, measles two years ago, influenza one year ago. Present Illness—Has been constipated since birth. When child was a year old, mother thinks she heard something snap in the abdomen and his trouble she believed to have been worse since that date. Child is habitually constipated. Bowels move once in four days, occasionally intervals being up to a week or ten days. In the intervals between bowel movements, abdomen becomes swollen and he complains of cramps, these sometimes being severe enough for him to roll on the floor. Bowels do not move at all except as the result of medicine and enemata. Child is dull, lazy and never feels like playing or running.

Physical Examination: Negative except for abdomen which is tremendously distended, most marked distention being in the left side, least distention in the right upper quadrant. Coils of intestine may be seen and felt through the abdominal wall. Rectal examination shows nothing but a very large spacious rectum filled with feces.

March 31, 1919. Operation. Median incision, dilated and hypertrophied colon found to extend from splenic flexure to rectum. Excision was performed starting above the hypertrophy and extending as low down as feasible to leave room for the anastomosis. Lateral anastomosis. Patient had an uninterrupted convalescence, was from the third to the eighth day given mild cathartic at night. Discharged home on the thirteenth day, requiring no catharties. Seen January 30, 1920. Patient is now lively, active and alert, physically and mentally. Has had a cathartic only once since leaving the hospital and that was given because he had a cold. Bowels moved regularly daily and mother considers him an absolutely well boy. Physical examination shows no distention of the abdomen and no abnormality that I can find.

Case 3. A. W., girl, 6 years old. Story very similar to the last case. Operation August 20, 1919. Similar operation also performed with the exception that no tube was introduced in the rectum through the anastomosis. Child did very well for a week after the operation and then became distended which I believe was due to the fact that she had not had a tube and had acquired a large fecal impaction above the anastomosis which became strained and fatal peritonitis developed.

Case 4. D. M. Boy, 3 years old. Family history negative. Past history unimportant but for fact that child had developed slowly. Since he was a year old has had attacks of vomiting at irregular intervals, the attacks lasting about three days at a time, the intervals lately becoming more frequent, being every two or three weeks. At the time of these attacks the abdomen becomes very much distended and the vomiting continues until the distention is relieved by enemata. In the intervals the bowels are loose but they pass very small amounts at a time.

Examination not remarkable outside of the abdomen, which shows considerable distention with numerous large freely movable masses which are not tender. The largest masses extend from the right iliac fossa across at the

CASE 4.—D. M. Radiograph No. 2.

level of the umbilicus toward the left upper quadrant (see radiograph No. 2, D.M.).

Operation July 11, 1919. Median incision. Large growth and hypertrophy of rectum, sigmoid and descending colon extending almost to the splenic flexure were found. This was cut off as low down as possible and end sewed up with catgut and inverted with silk suture. The colon up to a point above the hypertrophy was then excised. Lateral anastomosis performed between proximal end of colon and rectum. Small piece of rubber drain inserted. Wound sewed up in layers; skin, with horse hair. This convalescence was interrupted by whooping cough and a fecal fistula as an indirect result; the latter, however, closed after a short time. He had a slow convalescence and required some catharsis for two or three months, but has had none for several months now and is apparently perfectly well.

CASE 5. E. W., boy, 9 years old. Bottle fed baby. Always more or less constipated but has been much more marked during the last three

Case 5.—E. W.

years, during which time also the size of the abdomen has increased very markedly. He has been given strong purgatives two or three times a week during this time. Physical examination similar to Case 2.

Operation July 21, 1919. Descending colon and sigmoid excised, lateral anastomosis and tube introduced through the anus and anastomosis opening. Had an uneventful convalescence except that the abdominal wall remained loose and lax, the muscles not regaining their tone, and he required while in the hospital either Russian oil or a mild cathartic. Seen January 30, 1920. Bowels have moved every day since leaving hospital. Boy's general condition very much improved and the abdominal distention entirely disappeared though he still has considerable flare to the ribs.

From the literature, I have collected 113 cases which, with five of my own, makes a total of 118. Of these 60 were treated medically, with 41 deaths. Mortality, 67%; 4 unimproved,

.05%; 8 improved, 13%; 7 cured, 12%. Surgically treated, 58, with 24 deaths. Mortality, 41%; 2 unimproved, .03%; 8 improved, 14%; 24 cured, 41%.

From these figures it would appear that the chance of curing a patient by the surgical treatment was over three times as good as by medical treatment. The chance of losing the patient is two-thirds less. The number of improved and unimproved is pretty similar with both lines of treatment. It may be said that the disease is not a very common one and that the average surgeon does not have the opportunity to perfect his technique as much as he might wish. The largest number of operated cases that I have found reported by any one man is seven, of which five recovered and two died. It is a striking fact that practically all deaths reported from surgeons are from peritonitis, there being only one or two from shock or other causes. This being so it would seem to me that with improved technique and better judgment, the future offers a much brighter outlook than the past and that even now one should unhesitatingly recommend surgical treatment for all the pronounced cases. For moderate cases in which the enlargement of the colon is not great it would seem that medical treatment should be at first tried and surgery resorted to when medicine had proved unsuccessful and before the patient is in extremis.

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MEGACOLON IN THE ADULT WITH REPORT OF TWO CASES.

BY PEER P. JOHNSON, M.D., F.A.C.S., BEVERLY, MASS.

MEGACOLON in adults is a sufficiently rare disease to warrant my putting on record two cases coming within my experience although I am unable to make any further contribution to the knowledge of the subject.

Hirschsprung in 1886 advanced the congenital theory for this disease and the consensus of opinion seems to favor its acceptance especially for those cases appearing in infancy or early childhood.

As regards the etiology in adults, however, there is a much greater variety of opinion. Cases with symptoms traceable to early childhood are generally accepted as a true megacolon or Hirschsprung's disease, but when such symptoms do not make their appearance until adult life the condition is often considered to be not of congenital origin but an acquired or pseudo-megacolon. However, it seems reasonable to believe that in these cases the pathological condition has been present from infancy but not marked enough to give disturbing symptoms.

In addition to the congenital theory many others have been brought forward. Among these may be mentioned, an abnormally long colon, long mesentery with secondary torsion, chronic colitis followed by hyperplasia, anal fissure with consequent spasm, valve formation below the involved area, and neuro-muscular defects in one segment. While such conditions may be present it is still a question whether they are the cause of the disease and they are certainly too infrequent to furnish a satisfactory explanation for the majority of cases. Nor have these various hypotheses been generally accepted while the congenital theory continues to gain in favor.

Megacolon is characterized not only by a great dilatation of the colon but by a marked hypertrophy as well. This hypertrophy and dilatation is much greater than we are ordinarily accustomed to see in partial obstruction of the bowel. However, the pathology of those cases known to be congenital differs in no important respect from that in cases assumed to be acquired. Therefore it seems futile to attempt to divide megacolon into the two groups, (1) true megacolon, (2) pseudo-megacolon. As a matter of fact it seems proper to consider the disease as a megacolon only when there is no demonstrable etiologic factor.

A part or all of the colon may be involved but the sigmoid is the most commonly affected and when this is the case the morbid process not infrequently includes the rectum. There is great dilatation with marked hypertrophy of the bowel wall; the mucosa and the muscular

coats especially in the region of the circular fibers are principally involved. The blood vessels and lymphatics are greatly increased in size and the mesocolon is generally much longer than normal and considerably thickened. The sacculations having disappeared the affected portion is smooth, glistening in appearance and not infrequently resembles the wall of an ovarian cyst.

The symptoms are the result of intestinal toxemia due to fecal retention which at times may be enormous. The patient is generally poorly nourished, complexion muddy, tongue coated and breath foul. There is usually some anorexia and often nausea and vomiting. Constipation is the most striking feature. It is most obstinate and a month or more may elapse without movement of the bowels. The constipation may alternate with attacks of diarrhea. In some cases the constipation is extremely well borne and there is a remarkable absence of subjective symptoms. Pain is infrequent but may be occasioned by the necessarily vigorous attempts to move the bowels. The abdomen is generally greatly distended and large fecal masses may be present suggesting new growths. Case 1 was supposed by the attending physician to be an ovarian cyst and Case 2 was admitted to the hospital with a provisional diagnosis of abdominal tumor of hepatic or renal origin.

Finney states that, in differential diagnosis, tubercular peritonitis, chronic volvolus, annular carcinoma, dysenteric ulcerations and ovarian cyst must most frequently be considered.

The history and physical examination will frequently suggest the diagnosis but by means of the barium enema and x-ray the question can be definitely settled. Barium by mouth is too small in amount and requires too long a period to be of value.

Little is to be expected from medicinal treatment. Various surgical procedures have been suggested, plication of the colon, colopexy, colocolostomy, colostomy, ileo-sigmoidostomy and colectomy. It is evident that the method of procedure will vary in accordance as to whether a portion or all of the colon is affected. Whether one will do a one-stage or a two-stage operation will also depend somewhat upon this circumstance and the personal preference of the operator. But whatever the preliminary procedure, the ultimate object should be the complete ablation of the affected part. In spite of the most strenuous endeavors to empty the bowel by catharsis and irrigation there may often remain large quantities of fecal matter. This may be in the form of fecoliths, which is not especially objectionable, or in a thick fluid mass. This latter condition may render difficult a primary resection and anastomosis. Under such conditions a two-stage operation becomes inevitable. Failure to recognize this fact in my first case made it impossible for me to complete the operation as I had intended, obliging me to do a colostomy. Where possible my preference is for a one-stage operation. When required by the condition of the patient or the bowel I should prefer a preliminary cecostomy and ileosigmoidostomy for involvement of the whole colon and a cecostomy alone for involvement of only one portion. Through the cecostomy copious irrigation could be depended upon to empty the retained fecal mass.

Case 1.—Sigmoid.

Case 1.—Sigmoid.

Case 1. Female, about 60 years of age. This patient was suffering from dementia praecox and had been for 20 years an inmate of the Danvers State Hospital. Any history bearing

CASE 2. I.—Sigmoid. This mass occupies the right side.

on the condition of the megacolon was not available but it was not believed that her bowels were constipated or that she had any symptoms especially referable to this condition. In March, 1917, it was noticed that her abdomen was enlarging rapidly. An ovarian cyst was diagnosed and early in June of that year I was asked to see her with a view to operation. At that time her general condition was fair. There was great distention of the abdomen, most marked from just above umbilicus downward. There was visible peristalsis. The percussion note was tympanitic throughout and there was no fluid wave or evidence of tumor mass. Examination by vagina and rectum was negative. The x-ray was not available and the possible diagnosis was considered: (1) megacolon, (2) chronic volvulus, (3) incomplete obstruction of the sigmoid due to carcinoma.

For the following ten days she was given a diet with a small residue and energetic attempts were made to empty the bowel by cathartics and enemata. She was operated upon on June 16, 1917. Operative findings were as follows: The sigmoid was elongated, enormously distended and hypertrophied, the mesosigmoid was abnormally long and the blood vessels greatly dilated. The morbid process began gradually at the termination of the descending colon and extended into the rectum. The remainder of the colon was moderately distended but thin and atonic and contained no feces. No mechanical obstruction could be found.

A sigmoidestomy was done with the intention of uniting the descending colon with the rectum, but the rectum and the greater part of the sigmoid was filled with thick fluid feces which could not be emptied out and the anastomosis had to be abandoned. The stump of the rectum was sutured over the clamp while the stump of the colon with the clamp attached was stitched into the upper angle of the wound. As there was some soiling from leakage, a tube was placed in the pelvis. The portion removed measured three feet in length and 20 inches in diameter and contained between three and four quarts of feces.

The patient stood the operation well and made an uneventful recovery. Aside from her mental condition she has been in good health since. At the present time the bowels move twice daily through the artificial anus. The stools are normal and well formed. Considering her age and mental condition, it has not seemed advisable to restore the continuity of the bowel.

CASE 2. Male, 29 years of age. Admitted to the Beverly Hospital on January 29, 1920, with a provisional diagnosis of abdominal tu-

Case 2, II.—Post-operative x-ray showing the marked disproportion between the rectum and descending colon.

mor of hepatic or renal origin. On January 24th he had been seized with severe, colicky, abdominal pain most marked in the umbilical region. Castor oil had been taken, causing the evacuation of hard fecal masses but giving little relief to the pain. There was malaise and belching of gas but no vomiting.

The past history showed that the patient had been obstinately constipated from early childhood. A period of from ten to fifteen days was nothing unusual while at times thirty days would pass without a movement. During these periods there was but slight discomfort. The principal symptoms were: slight headache, coated tongue, foul breath, anorexia and distention. There was never vomiting or diarrhea. Enemata and large doses of castor oil (3 to 4 oz.) were the most successful methods of moving the bowels. The castor oil often had to be assisted by other drastic catharties. During attempts to move the bowels there was severe abdominal pain sufficient to keep him from his work for from three to seven days. In childhood he had been treated in a Swedish hospital for acute intestinal obstruction and at that time seven quarts of cherry stones were said to have been removed from the bowels by the aid of laxatives and enemata.

The physical examination showed a fairly well developed and nourished man. Complexion was sallow, sclerae muddy, breath fetid, tongue coated, abdomen distended, rigid and tympanitic to left of midline. On the right there was dullness from the costal border to Poupart's ligament and on this side there was a large doughy, painless, freely movable, melon-shaped mass. It was believed that this mass was fecal and that it occupied the cecocolon. Examinations of blood and urine were negative; Wassermann negative; stools obtained by castor oil were dark brown in color, formed and except for the presence of small, inspissated masses were negative. Under free catharsis the tumor mass entirely disappeared. On February 2 a barium enema of 96 ounces was given, revealing an enormous opaque mass occupying the right side of the abdomen and extending to beyond the midline and from the dome of the diaphragm to the brim of the pelvis. This mass was also thought to be in the ceco-colon. A barium meal was retained in the large bowel as late as five days but aside from stasis gave no other indication of trouble.

He was operated upon on February 17, 1920. The pre-operative diagnosis was congenital megacolon involving the cecocolon. Operative

findings: On opening the belly a tremendously thickened and dilated bowel presented in the wound which was first thought to be the cecum; but on tracing it downward it was found to end in a dilated and thickened rectum and upward in the descending colon. The cecocolon had a long mesentery and lay in the epigastrium, resting upon the stomach. The appendix was on the liver and the gall bladder was greatly distended but otherwise normal. The sigmoid and rectum were alone involved in the disease. The blood vessels were enormously dilated and all the coats of the bowel were affected; there were no sacculations and the longitudinal fibres instead of being in the form of taeniae were uniformly spread out over the surface of the bowel, especially in the lower half. The mesosigmoid was long and thickened. The affected portion was 25 inches in length and had a circumference of over 20 inches in its most dilated portion. On opening, it was found to contain two quarts of liquid feces and two fecoliths, each the size of the fist.

Operative Procedure: Sigmoidectomy with end to end anastomosis between descending colon and rectum. As the open end of the rectum was fully nine inches across, the posterior four inches were closed and the union was made with three rows of chromic gut sutures. A small cigarette drain at the site of the anastomosis escaped through the lower angle of the wound while a rectal tube was passed through the anus to above the point of union for relief of distention by gas.

The patient made a remarkable convalescence and was decidedly comfortable. There was no abdominal distention and the wound healed by first intention. The bowels moved readily with three tablespoonfuls of liquid parafine daily. The color of his skin and sclerae became clear and he felt much improved in every way.

Proctoscopic examination on March 11 showed the suture line healed and great dilatation of the rectum. A barium enema at this time showed the great disproportion between the lumen of the rectum and the colon. The patient was discharged March 12, 1920. He reported on October 1, 1920, that he had been working steadily as a machinist since April. His bowels moved once or twice daily without the aid of cathartics. He considers his health to be excellent and he is entirely free from all of his previous symptoms.

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DISCUSSION.

DR. GILE, Hanover, N. H. When I was requested by the Secretary to open the discussion on these papers on diseases of the large intestine I felt much hesitation. My cause for such hesitation was due to the fact that I have recently heard so much about complete removal of the colon for all the ills of life, real and fancied, that I feared a series of papers along this line would be presented.

I was greatly relieved when the program arrived and I discovered that the papers dealt only with different pathological things concerning which there is some actual information from experience.

I shall confine my discussion to the papers dealing with megacolon. In the cases of megacolon in children I am not wholly convinced of a congenital pathology in the majority of these cases despite the evidence that has been presented. My own limited experience would point to the condition as secondary to some intermittent obstruction.

I have seen but two cases of this condition. One, a child of five with a content of three quarts in the large intestine between the lower end of the sigmoid and the spleenic flexure. In this case there was a ball of feces of firm putty-like consistency as large as an orange. The history showed the passage of only liquid stools and the fecal mass clearly acted perfectly like a ball valve.

The second case showed a fibrous adhesive band just at the lower end of the sigmoid, not producing a complete obstruction but without doubt frequently causing a sharp kink of the sigmoid over it and thus producing intermittent obstruction. Even without such adhesive band it would seem reasonable that at this point where the longer mesentery of the sigmoid suddenly changes to the short one of the rectum such sharp reflexion might often occur and great distention of the colon above might naturally take place. The pathology is parallel with that that causes the great distention of other pockets of the body. We do not, for instance, get a great hydronephrosis with a complete and permanent obstruction of the ureter, for with such obstruction the pressure in the urinary tubules soon comes to equal that in the circulation of the kidney and that organ ceases to function, but when the obstructive cause in the ureter is intermittent the pelvis of the kidney becomes slightly distended with the first attack, then the obstruction is relieved and the pelvis emptied. The next time it occurs the wall yields more readily as a result of the previous stretching and this time balloons larger; with many repetitions there finally occurs a large collection of fluid gradually pressing back into the tubules of the kidney.

The cases of greatly distended gall-bladder holding a pint or more of fluid seem to me to occur in the same way, resulting from a single round stone that intermittently obstructs the cystic duct. These conditions appear entirely parallel to that of the greatly distended colon and seem to be the simpler explanation. The variant microscopic findings in the bowel wall seems not incompatible with a change that results from the unusual pressure and might be explained in this way quite as well as by a congenital variation. In these cases occurring in adults similar explanation would appear reasonable and with added likelihood as atony of advancing years occurs. The simpler and more visible explanation always appeals to me more than the complex and obscure, hence perhaps my views as above indicated.

Dr. David Cheever, Boston: First, Mr. President, the readers should be congratulated on their extremely successful treatment of a disease at once so unusual and so difficult to handle. One of the questions I was going to ask, has been answered in part by Dr. Johnson, namely, what proportion of these cases of congenital origin grow to adult life? Cases of megacolon are not uncommon in childhood, and yet it is very difficult to ascertain from the literature what becomes of these cases or how many grow up.

There has been under my observation in the Brigham Hospital, a student about 24 years of age, who has had this condition since infancy; the history being that his bowels have never moved except by enemata. In his case, there is colonic stasis without actual toxemia, as he is extremely well-nourished, vigorous, has a clear complexion, and is apparently in the best of health. The x-ray shows an enormously distended colon. I was much interested about the view taken of his case at the Mayo Clinic, where he went for diagnosis and treatment, and where there appeared to be a considerable diversity of opinion; some members of the surgical staff advising operation and others taking a strongly contrary viewpoint. As a result, the patient felt inclined to postpone operative interference. This patient gets along very well most of the time, and, as I have said, shows none of the constitutional disturbances associated with constipation. His condition is described by one of my colleagues who saw him and said, "This patient simply carries his bedpan with him." Every other day he flushes out his colon with about a gallon of water, which takes from a half an hour to an hour, and which makes him comfortable for about 48 hours. The difficulty is, of course, that on occasions he finds himself in a situation where this cannot be done, as, for instance, on long railroad journeys, and once in a while he has an attack of pain, abdominal distention, and vomiting, and suggestive signs of intestinal obstruction, all of which cause him much anxiety, but which have never yet been serious. His finger nails show changes suggestive of those associated with pulmonary osteo-arthropathy. Many of my colleagues have given it as their opinion that a case of that type will certainly not reach middle life; that is, he is likely to be carried off by pneumonia or some other intercurrent disease. I am much interested in Dr. Johnson's case as bearing on that particular point.

Dr. Alfred M. Rowley, Hartford: I want to thank Dr. Ladd and Dr. Johnson for their papers, and I want to ask Dr. Ladd whether he has noticed any increase in muscular hypertrophy at the recto-sigmoidal junction. I noticed that the dilatation practically ended at this point. There is a theory advanced that there may be either a spasm or hypertrophy of the fibres here, and I want to ask him if he has noticed any such hypertrophy or spasm.

Dr. D. F. Jones, Boston. There was a very extraordinary case at the Massachusetts General Hospital, and perhaps Dr. Richardson can give us the history of Mary King, who was operated on six or eight times for megacolon. She had a resection of the sigmoid at least twice, and each time an enormous colon was reformed. She turned up at the Massachusetts General Hospital about once in two years for a great many years, and when she did not go to the Massachusetts General Hospital, Dr. Maurice Richardson operated upon her in some other hospital. She became a morphine fiend, finally, and died.

Original Article.

CONDITIONS IN PALESTINE DURING THE WAR AND MEDICAL RELIEF AMONG THE CIVIL POPULATION AND THE REFUGEES.*

By Izak Alcazár, M.D., Boston.

(Concluded from page 71.)

NATURE OF TRACHOMA.

It may not be amiss to give a very brief description of this terrible eye disease from which a large percentage of the inhabitants of Palestine suffer.

Trachoma is largely prevalent in the Orient, and especially in Egypt and Palestine. It is called by the natives, "sore eyes," or "granulated lids." The disease manifests itself by an

* On the 25th of May, Dr. Alcazár sailed for Palestine the second time to open an eye, ear, nose and throat hospital for the needs of the civil population. The plan is to establish the hospital in Haifa and hold clinics in the surrounding villages, one in Nazareth and one in Acca. The chief feature of the work will be to educate the natives as to the contagious nature of trachoma and in prophylactics.—*Editor.*

THE TRACHOMA CLINIC.

inflammation of the lining of the under surface of the eyelids called the conjunctiva, and involving also that part of the eye which is commonly known as "the white of the eye." The medical profession has not yet been able to discover the specific organism which is responsible for this dreadful malady. Therefore our present weapons in combating the scourge lie in three directions: first, by palliative medicines; second, by surgical methods which aim at correcting as far as possible the deformities and the faulty vision; and third, by educating the people in preventive measures.

EARLY SYMPTOMS OF TRACHOMA.

Trachoma may begin without any alarming symptoms, and the victim may have the disease for years without being aware of his serious condition. But this is the exception. As a general rule, the trouble begins with a sensation as if there is dirt or sand in the eyes, which soon become red and painful. The lids swell, the discharge which at first is watery soon changes to pus and the lids become adherent in the morning. As the inflammation of the under surface of the lids progresses the conjunctiva becomes rough, somewhat like the appearance of a strawberry, and it feels like wet sandpaper. This acute attack may last weeks or months, when it subsides, but alas, only to recur many times. With each attack the lids become contracted and distorted, and the eyelashes which are normally turned forwards and upwards become turned downwards and backwards, thus constantly brushing upon the cornea, and causing the patient excruciating pain. We have all experienced the great discomfort which a small cinder or an eyelash causes in the eye. Imagine, then, the pain which victims of this disease experience with every wink of the eyelid, the under surface of which is covered with rough particles of flesh. This rough surface erodes the cornea, forms an ulcer, which in time either heals, leaving a permanent white scar, or it may perforate, with subsequent evacuation of the whole contents of the eyeball. In the first instance there remains a white, dense scar, where once a beautiful iris existed, and in the last instance we have an ugly shriveled stump instead of a beautiful live, movable eye.

If the inflammation of the eyeball is prolonged and very severe, all the coats of the eyeball participate in the process and become unevenly distended like a bunch of grapes. The eye protrudes beyond the eyelashes, thus giving the person a most hideous and ugly appearance. I have seen hundreds of such cases. Such a condition is bad enough for men, but it is dreadfully disfiguring to women. Many a beautiful girl has become positively repulsive. I used to spend a great deal of time urging such patients to have the eye enucleated and to have them use an artificial glass eye, which

A Group of Trachomatous Children.

would improve their looks a great deal. But, strange enough, the natives have a horrifying aversion to the removal of even such an eye.

Many operations have been devised to restore the distorted lids of such patients to the normal position, as near as possible, and it should be stated that it is the commonest operation performed in the East. The next operation in point of frequency is for the formation of an artificial pupil. The white scar which forms on the cornea and which covers the pupil, fortunately, does not always completely cover the entire cornea. A clear margin frequently remains around the circumference. An artificial pupil can often be made underneath the clear cornea by cutting away a portion of the colored part of the eye, known as the iris. The artificial pupil thus formed enables the patient to discern objects on the outer field of vision. An operation of this kind is a great blessing to such unfortunate patients. It makes it possible for them at least to get about without being led. The white scar has exactly the effect of a piece of ground glass placed before the eye, obscuring everything in the field of vision. The nerve of the sight, however, seldom becomes affected in this disease.

The result of such an operation is almost like a miracle. The patient sees immediately, the iris is cut off, and while still on the operating table. Many a patient showered blessings upon me the instant he beheld the light. Invariably it was more than I could do to prevent him from grabbing my hands in his attempt to kiss them.

THE SCHOOL WORK.

If I were asked what was the greatest achievement of my service in Palestine, I would unhesitatingly answer, the school work.

I became convinced that in order to eradicate trachoma from Palestine the campaign should start with the schools. A child has enough diseases to fight against in its early years of life without being threatened with a malady that results in blindness.

With the assistance of the military authorities, school board and influential citizens, I launched the fight against trachoma in the schools at Jaffa and Jerusalem. The schools were divided into districts, each district to include five hundred children. A trained nurse was placed in charge of each district, which she visited daily and treated the eyes and ears of the pupils according to my instructions.

I made my visits to the schools from 7.30 in the morning until 10. Each nurse accompanied me to her own district. I examined every pupil and she wrote the diagnosis and treatment against the name. The classes were suspended during the time required for treatment. With my hospital, clinic, and operative work, it is evident that I could reëxamine the schools only once in about three months. The district nurses had worked in the clinic sufficiently long to understand the various remedies used so that I could rely on their own judgment. The acute cases and those progressing favorably were sent to my clinic for new instructions.

The cases which were a source of infection to the other pupils were strictly separated. This plan was vigorously enforced in the kindergartens where the little tots could not be expected to follow the rules of precaution which older pupils were instructed to observe. Furthermore, no new scholars could be ad-

A GROUP OF MASTOID PATIENTS.

mitted into any school under my charge without a certificate from me stating the exact condition of the eyes. During my service in Jaffa I had two thousand children under my supervision, and 24 schools in Jerusalem with an enrolment of over five thousand.

The results of this campaign soon became evident to the local authorities, parents, and to the pupils themselves, so much so that the children looked forward to the hour of their treatment. The teachers noticed that as a result of this campaign pupils lost fewer days and did better class work than was previously the case. I am confident that many a child in the Holy Land will go through life unhampered by faulty vision or deafness because of this school work which it was my privilege to institute. This is by far the most important work I have done in Palestine. How much greater the results would be if three or four physicians could devote their whole time to this urgent and worthy problem! The field is boundless.

THE WORK OF THE EAR, NOSE AND THROAT.

So far I have devoted a great deal of space in describing the work of the eye department because two-thirds of my time was devoted to it. There was, however, a great deal of nose and throat work done.

Most of the nose and throat conditions were of the low grade chronic types. It was useless to attempt to cure such cases, because each patient required a great deal of individual attention, and in a clinic of the size I was conducting it was impossible to devote the time required. The only thing that could be done was to prescribe cleansing drugs and soothing sprays. More time was devoted to the correcting of intranasal deformities.

A large number of tonsil and adenoid operations were performed at Jaffa and at the Jerusalem hospitals. There was time only for the very urgent cases. The chronic and the very large tonsils were considered subjects for operation.

MASTOID AND TRACHOMA PATIENTS.

The ear conditions presented peculiar complications. I found among the patients a large

number of chronic suppurating ears. The modern methods of treating acute ear infections are unknown in Palestine. Previous to the war there were in Palestine two German ear specialists. Only the very rich could apply for treatment, and the poor were neglected; consequently, a great many of these patients presented a middle ear with foul discharge and most of its hearing power destroyed. The ordinary treatment for most of these patients proved ineffective so that it was found necessary to perform the serious operation of a radical mastoid in order to rid them of the discharge and save them from the possibility of brain complications, such as meningitis or brain abscess.

Mastoid and Starvation.

During the months of November and December of 1918 and the January and February of 1919 there was in Palestine a terrific epidemic of influenza with a complication of meningitis and mastoid infection. Many of these patients had an involvement of both ears. I was the only otologist for the whole of Southern Palestine, containing a population of about three hundred thousand inhabitants. I was therefore ordered to undertake the ear, nose and throat in Jerusalem in addition to my clinic and hospital work at Jaffa. I left Jaffa for Jerusalem by automobile every Thursday afternoon. The following morning I examined and treated this class of patients and operated in the afternoon. On Saturdays I acted as consultant to the American Red Cross in Jerusalem, as they had no otologist on their staff. Between my regular work and that of the Red Cross, I spent two very busy days in Jerusalem. It was necessary to leave my cases to the care of the local physicians and return to Jaffa on Sunday morning to resume my hospital and clinic duties.

I kept up this work between Jaffa and Jerusalem for six weeks, but found it very taxing to my strength. The number of acute mastoids in Jerusalem became too numerous and so complicated that it was thought advisable that I should be transferred to Jerusalem and take charge of the entire department of the eye, ear, nose and throat. Here I remained stationed until I left Palestine on July 30, 1919.

The work at Jaffa was too urgent and too imporant to be neglected altogether. A young physician who had had some experience in diseases of the eye, was placed in charge of my clinic and I made weekly trips to Jaffa to perform the urgent operations of that enormous field which today could keep busy at least five specialists in this line of work. Needless to say that a limited number of operations could be done in one day. The very serious cases were sent to my hospital in Jerusalem.

CONCLUSION.

This narrative briefly depicts the sufferings of a people who have lived four long years with war, starvation and disease staring them in the face. Countless died; many were left to drag out a miserable existence. It was to these people that I was called to give a helping hand in the hour of their distress. I did it gladly; but the work is still in urgent need of continuation. Now is the time to hasten relief to those people who are still suffering from the shock of war and from the acute ophthalmic conditions which are leading them inevitably to partial or complete blindness.

The way to answer this great and urgent need is to establish in a large city a central hospital. Connected with it there should be a traveling clinic conducted in a large tent and moving about from village to village, thus reaching a large portion of the population. In this manner cases requiring serious operations could be referred to the central hospital. Medical aid could thus be brought to the huts and tents of the natives, especially to the peasants in the villages, and to the wandering Bedouin in the deserts. Palestine will never rid itself of this dreadful trachoma if the schools and those who dwell far away from the cities are neglected. Furthermore, it is a crime to encourage emigration to Palestine until the new colonists could be offered a land reasonably free

from trachoma. It must never be lost sight of that the majority of the children who are born in the land have trachoma.

When the last day of my labor among the inhabitants arrived, I laid down my instruments with sincere regret, but also with a cherished hope that some time in the near future I might answer the call for a more constructive and lasting benefit to a land of sacred tradition and to a long suffering people.

"If I forget thee, O Jerusalem, let my right hand forget her cunning."

Medical Progress

RECENT PROGRESS IN SURGERY.

By Edward H. Risley, M.D., Waterville, Maine.

The two surgical conditions to which writers have devoted the most concentrated attention during the last quarter are goitre and empyema. The July 17th number of the *Journal of the American Medical Association* prints four articles dealing with the purely surgical aspects of the disease. T. J. Nason discusses mistakes in one hundred thyroidectomies and states that the ideal time for operation is within the first six months. The closer we get to the high wave of toxicity, the higher is the mortality and the larger the number of incomplete cures. The patient who is operated on before the first crisis is eventually much better off than the one who is carried to and then through the crises by medical treatment, and operated on later. The author describes in detail his technic of fractional cauterization of the gland in bad cases, which has proved beneficial as a preliminary to or in place of ligation.

F. A. Lahey devotes his discussion largely to the diagnosis and management of intrathoracic goitres. J. R. Eastman believes that local anesthesia is the ideal anesthesia for partial or complete thyroidectomy and describes his technic. His article is graphically illustrated.

Willard Boullet describes his so-called emergency technic in thyroid cases. A long linear incision is made along the inner border of the sterno-mastoid muscle and the gland reached on its lateral aspect mainly by muscle retraction. He claims a more bloodless and less traumatizing operation and less liberation of toxic material. For details of technic the reader is referred to this article. For the skilled surgeon it would seem to be a valuable procedure but probably not one to be tried by the occasional thyroid operator.

The August number of the *Annals of Surgery* also presents a symposium on thyroid diseases. Porter, M. F., presents a clinical study of one hundred and thirty-nine cases and makes the observation that thyroid disease may be an important factor in the causation of female sterility.

Mayo, C. H., calls attention to the fact, as shown by the first million draft recruits, that we have in the United States definite goitre regions, the condition being most common in the northwest and second in the Great Lakes region. He discusses the differential diagnosis of exopthalmic goitre and adenoma of the thyroid with hyperthyroidism, two often compared but clinically different conditions. He refers to Plummer's exhaustive study in 1915 in which it was shown that enlargement of the thyroid was noted from five to ten years earlier in the adenoma cases than in the exopthalmic cases and that hypertension was practically always present in the former but rarely in the latter.

Crile, G. H., also discusses briefly toxic adenoma in relation to exophthalmic goitre.

Judd, E. S. discusses at length the results of operation for adenoma with hyperthyroidism and exopthalmic goitre. He speaks of a third group in which the nervous manifestations are prominent and the differential diagnosis often difficult but in which the basal metabolism is normal, and in these cases medical rather than surgical treatment is indicated. He emphasizes the great importance of the basal metabolism studies in all goitre cases.

The best article of this whole symposium is that on the management of toxic goitre from the surgical point of view by C. H. Frazier, who also emphasizes the importance of basic metabolism studies in all cases of thyroid derangement. Because the degeneration changes that take place in the vital organs during the period of procrastination under medical treatment of early cases are permanent and preclude the ultimate and complete recovery of the patient he takes a firm stand for early operation. Early ligation serves a definite purpose in one way in that it is a very good index of the degree of reaction that may be anticipated after the final thyroidectomy.

Freeman, L., describes his tourniquet operation in toxic cases.

The July number of the *Annals of Surgery* furnishes a group of four articles on empyema. Ashhurst, G. P. C., displays some very interesting diagrams and half-tone plates. He is a firm believer in preliminary aspiration of a chest suspected of being empyematous. Thoracotomy should be postponed until the fluid is frankly purulent, as this delay will permit the formation of former adhesions and prevent the collapse of the lung when the cavity is opened. The operation should preferably be done under local anesthesia.

The remaining three articles discuss the etiology of clinical empyema with the various procedures to be used in different types of empyema. Lilienthal's tabulation of conditions and operative indications is a valuable contribution to the subject.

Lovett and Wolbach have contributed a valuable piece of clinical and pathological work to the subject of obscure bone lesions. The important fact to be drawn from this work is that tuberculosis in bone may simulate any other infectious process in location and character of the lesion. Diagnosis from x-ray studies alone is, therefore, occasionally impossible and recourse must be had to clinical evidence, and, when possible, to pathological examination.

Rubin presents in detail his technic for the non-operative determination of the patency of the Fallopian tubes by means of intrauterine inflation with oxygen and the production of an artificial pneumoperitoneum. He outlines indications and contradictions. The procedure is radical but of undoubted value in the hands of an expert.

Sachs and Belcher present a preliminary report on the intravenous injection of a saturated salt solution to reduce cortical odema in operations on the brain. This is especially valuable when there is a tense dura which it is necessary to open for the sake of exploration. The salt solution reduces volume and hence tension and the danger of hernia of the brain subsequent to operation is much lessened. This has been proven experimentally and clinically and the technic seems of decided value.

Adron presents a valuable contribution to the literature on brain abscess. He finds four principal etiologic factors in the formation of abscess of the brain. These are otitic infection, frontal sinusitis, injury to the skull and hematogenous infection. The abscess is usually single except when it is of hematogenous origin associated with a general pyema and then it is frequently multiple. A brain abscess in its course may pass through the initiatory, the quiescent and the terminal stages. The different phases can be determined more definitely from the history and duration of the complaint than from the physical findings. Surgical treatment is of little value in the initiatory or terminal stages, or in the presence of meningitis, but is of great benefit during the quiescent stage. If there is doubt as to the differential diagnosis of brain tumor and brain abscess in the quiescent stage it is advisable to explore rather than to perform a decompression for intracranial pressure or to wait for terminal symptoms.

Again, in the *Annals of Surgery* for September, we have an excellent symposium on empyema by Tuffier of Paris, Hedblom of the Mayo Clinic, Lincoln Davis and J. A. Hartwell, and articles on the treatment of bronchial fistulae, perforating war wounds of the chest and thoraco-abdominal injuries. This is a valuable number. It should be read as a single chapter on lung surgery to be properly digested and appreciated.

Murphy Memorial Oration.—Sir Berkeley Moynihan delivered the first Murphy Memorial Oration of the American College of Surgeons during a meeting of the College in Montreal on October 11. The oration was founded in honor of the late Dr. J. B. Murphy of Chicago. Sir Berkeley Moynihan also presented to the College a mace, the gift of the surgical consultants of the British Army during the war.

Research Station at Pensacola.—In order to carry on research work on bubonic plague, a research station has been established at Pensacola by the United States Public Health Service. Additional equipment will be provided to facilitate the investigations which will be conducted by trained experts.

Montefiore Home and Hospital.—A bequest of three hundred thousand dollars to the Montefiore Home and Hospital for Chronic Diseases is included in the will of the late Jacob Schiff.

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THE JUNE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

THE year 1920, hallowed by the anniversary of the landing of the Pilgrims, ought to be a memorable year in the history of medicine in New England. It seems right and fitting that this, the great Association which maintains the best traditions of medicine in our great country, should visit New England on the anniversary of the landing of the Pilgrims on our coast.

Invited by the Massachusetts Medical Society, the Association has honored the City of Boston by accepting the invitation to make our city its meeting place at the next meeting in June. It is sixteen years since Boston entertained the Association before. Those of us who were present will remember the value to Boston of the scientific work that was done, the friendships which were formed, the general benefit which the profession of New England received from the entertainment of the vast, eager, enthusiastic throng of the profession of our great country which attended the meeting. We may, perhaps, be allowed to say that the Association enjoyed the meeting, which both from the character of the scientific work and from the entertainment provided, was a memorable one.

On this year, the year of our great historical anniversary, they are coming again. We hope that this year, as in 1906, the profession will unite in giving them a most hearty and cordial welcome. The opportunity is a great one, and if embraced in the same spirit, ought to result in a meeting only more successful than that in 1906. All that is needed, and we feel sure that it will be forthcoming, is the enthusiastic cooperation of the profession of New England with the committee in charge to make it memorable. The men want to come here, they remember the last occasion with pleasure, and it is up to us to make of this one a success. Let us take hold and do so.

Finally let all physicians who are not members of our great national association join at once, and participate in the pleasures and advantages of the meeting, and all who are now members aid the administration by registering early, on Monday and Tuesday, the sixth and seventh of June. The great flood of arrivals from a distance will come late Tuesday afternoon and early Wednesday morning, so that if those who live in this vicinity will register at Mechanics Building on Monday they will, with little trouble to themselves, help the committee in avoiding trouble and confusion.

There will be a program of clinics at the various hospitals on Monday and Tuesday which we hope will make it worth everyone's while to come on the first day. On these two first days will be concentrated all the clinical work, as it is the policy of the Association, and a wise policy it is, to schedule no clinics which might interfere with the scientific work of the sections. So it will be to the advantage of all who possibly can, to come on Sunday and register early Monday morning, the first day. On account of the large expected attendance, the presentation of a registration card will be necessary for admission to the clinics.

Again, let us take hold and help the great medical institutions of Boston, these schools, hospitals and laboratories of which we are justly proud, to make an adequate and memorable impression on our members from all over the land, and gain from them, on the other hand, inspiration and encouragement to better work for humanity.

MEDICAL NOTES.

Weighing and Measuring of Children.—To establish a standard table of the heights and weights of children, a conference of representatives of the U. S. Children's Bureau, the U. S. Bureau of Education, the U. S. Public Health Service, and of various educational and private organizations working for the betterment of children, has just been held in New York City, according to a statement issued December 20, 1920, by the Children's Bureau of the U. S. Department of Labor.

At the present time, various tables of measurements are in use by the different organizations engaged in weighing and measuring children. The results of the tests are not comparable; also considerable confusion has arisen because of apparent differences in the standards of normal development as given out by the various organizations. The conference brought out the fact that the various tables are in substantial agreement as to the fact, the differences being chiefly matters of presentation.

A complete standard table will be prepared by a committee, and all future weighing and measuring of children can then be in accordance with this uniform table. The findings of the tests will be comparable and much greater use can be made of the facts revealed.

The conference was attended by the following: Dr. Bird T. Baldwin, Iowa State University; Dr. Taliaferro Clark, U. S. Public Health Service; Dr. William R. P. Emerson, Nutritional Clinic for Delicate Children; Dr. L. Emmett Holt, Child Health Organization; Mr. Ira V. Hiscock; Mr. Frank A. Manny, Nutritional Clinic for Delicate Children; Dr. Anna L. Rude, U. S. Children's Bureau; Mr. Edgar Sydenstricker, U. S. Public Health Service; Prof. Edward L. Thorndike, Columbia University; Mrs. Ira Couch Wood, Elizabeth McCormick Memorial Fund; Dr. Thomas D. Wood, Columbia University; Dr. Robert M. Woodbury, U. S. Children's Bureau.

A Research Information Bureau.—The National Research Council has established a Research Information Service as a general clearing-house and informational bureau for scientific and industrial research. This "Service," on request, supplies information concerning research problems, progress, laboratories, equipment, methods, publications, personnel, funds, etc.

Ordinarily inquiries are answered without charge. When this is impossible because of unusual difficulty in securing information, the inquirer is notified and supplied with an estimate of cost.

Much of the information assembled by this bureau is published promptly in the "Bulletin," or the "Reprint and Circular Series" of the National Research Council, but the purpose is to maintain complete up-to-date files in the general office of the Council.

Requests for information should be addressed, Research Information Service, National Research Council, 1701 Massachusetts Avenue, Washington, D. C.

Brooklyn Cardiological Society.—The first meeting of the Brooklyn Cardiological Society was held at the office of the president, Dr. William J. Cruikshank, 102 Fort Greene Place, Brooklyn, N. Y., on Monday evening, November 29, 1920. It is believed that this is the first Cardiological Society ever formed in New York or in any other state in the Union. Dr. Cruikshank delivered the opening address, and other speeches were made by the Hon. Andrew MacLean, the Rev. Dr. Emil Kraeling, Ph.D., Phil.D., and Mr. Henry Allan Price.

The following physicians were elected as officers and honorary members of the Society:

William J. Cruikshank, M.D., F.A.C.P., president; Glentworth R. Butler, M.D., F.A.C.P., vice-president; William W. Laing, M.D., 195 Greene avenue, Brooklyn, N. Y., secretary; Frank Bethel Cross, M.D., F.A.C.P., 832 President street, Brooklyn, N. Y., treasurer. Honorary members: Thomas Lewis, London, Eng.; Richard C. Cabot, Boston, Mass.; Sir James Mackenzie, London, England; John Cowan, Glasgow, Scotland; Robert Hurtin Halsey, New York; William Thomas Ritchie, Edinburgh, Scotland; W. S. Thayer, Baltimore, Md.

BOSTON AND MASSACHUSETTS.

Week's Death Rate in Boston.—During the week ending January 15, 1921, the number of deaths reported was 198 against 213 last year, with a rate of 13.63 against 13.75 last year. There were 26 deaths under one year of age against 34 last year.

The number of cases of principal reportable diseases were: Diphtheria, 96; scarlet fever,

55; measles, 58; whooping cough, 10; tuberculosis, 41.

Included in the above were the following cases of non-residents: Diphtheria, 7; scarlet fever, 5; measles, 1; tuberculosis, 6.

Total deaths from these diseases were: Diphtheria, 4; whooping cough, 1; tuberculosis, 18.

Included in the above were the following non-residents: Diphtheria, 1; tuberculosis, 2.

MASSACHUSETTS SOCIETY FOR MENTAL HYGIENE.—At the luncheon of the Massachusetts Society for Mental Hygiene at the Copley-Plaza, December 10, 1920, there were about 114 present. The speakers were: Dr. Thomas W. Salmon, Medical Director of The National Committee for Mental Hygiene, New York, and Dr. A. W. Stearns, Medical Director of The Massachusetts Society for Mental Hygiene. Their subjects were: "Practical Tasks in Mental Hygiene," and "The Call for Mental Hygiene Activity in Massachusetts," respectively.

Dr. Walter E. Fernald, vice-president, presided in the absence of the president. At the annual meeting of the society, the following persons were elected as directors for a period of five years: Hon. Frederick P. Cabot, Dr. C. Macfie Campbell, Dr. Walter Channing, Prof. F. Stuart Chapin, Mrs. W. Murray Crane, Dr. Herbert J. Hall, Dr. John A. Houston, Prof. George E. Johnson, Frederic H. Knight, Ph.D., Bishop William Lawrence, Dr. Abraham Myerson and Mrs. George T. Rice. To fill vacancies in the group the term of which expires in 1923, the following were elected: Mrs. T. Russell Sullivan, G. R. Agassiz and John B. Tivnan.

Following the meeting of the Society, there was held the annual meeting of the directors. The following officers and executive committee were elected: President, Dr. C. Macfie Campbell, in place of Prof. William H. Burnham, resigned; vice-president, Dr. Walter B. Fernald; treasurer, Charles E. Ware, Esq.; executive committee: Miss Edith N. Burleigh, Hon. Frederick P. Cabot, Dr. Donald Gregg, Dr. Abraham Myerson, Herbert C. Parsons, Mrs. George T. Rice, Dr. Charles E. Thompson.

Since 1913, this Society has conducted an extensive educational campaign by means of its lecture bureau, the distribution of selected literature, and by conferences. As the general field of mental hygiene is highly developed in Massachusetts, the Society will devote itself in future chiefly to the following specialized fields:

1. The improvement of medical standards through better teaching in the schools and through medical societies.

2. Increased emphasis in the field of education by introducing courses on mental hygiene into colleges, normal schools, and other special schools, both public and private.

3. The prevention of mental disease through earlier diagnosis and treatment, by means of establishing clinics in courts, state and general hospitals.

4. The extension of special classes now provided for by law, but spreading slowly.

5. The application of hygienic principles of pedagogy through mental clinics in public and private schools.

6. A more scientific and humane, as well as more effective, attitude toward delinquency, through recognition of individual traits.

7. The application of knowledge of personality and temperament, as well as the prevention of disease, in the industries.

8. The diffusion of correct and sensible views concerning mental health, through popular education and publicity.

SOMERVILLE MEDICAL SOCIETY.—At the annual dinner of the Somerville Medical Society, held recently in Boston, Dr. M. W. White was elected president, Dr. George Mahoney, vice-president, and Dr. Edmund H. Robbins, secretary and treasurer. The report of the secretary showed that the membership of the Society has increased during the past year and now includes almost every physician in Somerville. Dr. White, the president of the Society, was graduated from Boston College in 1894, and from Harvard Medical School in 1898. He was house physician at Carney Hospital during the Spanish-American War, and during the World War he was the medical member of the draft board of Division 1, Somerville. Dr. White has practised in Somerville for twenty-one years and is a member of the Somerville Hospital Staff.

At its meeting, the Somerville Medical Society was addressed by Dr. John Bottomley of Boston, who spoke on "Surgical Reminiscences," and by Mrs. Charles E. Mongan of Somerville, and Dr. Harvey Towle and Dr.

Paul White of Boston. Dr. Charles E. Mongan was delegated to represent the Society at all maternity aid hearings.

New England Ophthalmological Society.—A meeting of the New England Ophthalmological Society was held at the Massachusetts Charitable Eye and Ear Infirmary in Boston on the evening of December 21, 1920. The program included discussion of hospital cases by Dr. W. D. Rowland, and the following papers: "Methods of Dealing with the Capsule in Cataract Extractions," by Dr. Arnold Knapp; "Results of Cataract Extraction in Capsule," by Dr. Allen Greenwood; and "Intracapsular Cataract Extraction," by Dr. F. H. Verhoeff.

Tuberculosis Consultation Service in Massachusetts.—The Massachusetts State Department of Health has been making experiments in a number of communities to determine the value of consultation service in the prevention and cure of tuberculosis. Consultation clinics have been established in 16 places, including Worcester, Gardner, Fitchburg, Clinton, Lowell, Lawrence, Haverhill, Woburn, Taunton, Brockton, Fall River, Plymouth, Pittsfield, Springfield, Holyoke and Adams. The method has been for the superintendent or some designated member of the medical staff of one of the State tuberculosis sanatoria to attend the clinics at no cost to the patient or to the city, the consultant in such cases being an expert in the diagnosis of tuberculosis. In each of the places where the trial has been made, the consultations have been held in the local dispensary on a designated Wednesday of each month, so that the medical staff officer from the nearest sanatorium could take care of four such consultations each month. The experiment seems to have been attended with considerable success, inasmuch as these consultations have been well patronized and both the local physicians and the patients appear to have been glad of the opportunity to secure expert advice. If in the opinion of the Health Department the results of this work warrant continuing this service, consultation clinics may be established in many other communities.

War Relief Fund.—The French Orphanage Fund has received contributions to a total amount of $631,305.25.

Public Lectures at the Harvard Medical School.—A series of free public lectures on medical subjects to be given on Sunday afternoons this winter, have been announced by the Harvard faculty of medicine. The speakers will be physicians connected with the Harvard Medical School, and the lectures have been carefully arranged so as to cover subjects in which there is a wide public interest.

The lectures will be given at the Medical School, Longwood avenue, Boston, on Sundays, from January 2 to March 27. Each lecture will begin at 4 P. M. No tickets will be required, but in view of the popularity of these lectures in past years and of the fact that the doors will be closed at five minutes past the hour, those who wish to obtain seats are urged to arrive punctually. The full schedule of lectures is as follows:

Jan. 2—Dr. R. W. Lovett, "Infantile Paralysis."

Jan. 9—Dr. Alfred P. Rogers, "The Correction of Dental and Facial Mal-Development to Children." (With lantern demonstration.)

Jan. 16—Dr. Frederick T. Lord, "Pneumonia: Its Cause, Prevention and Treatment."

Jan. 23—Dr. Franklin S. Newell, "The Hygiene of Pregnancy." (To women only.)

Jan. 30—Dr. Harris P. Mosher, "Catarrh: Its Prevention and Treatment."

Feb. 6—Dr. John Lovett Morse, "A Talk to Parents about Their Children."

Feb. 13—Dr. Reid Hunt, "Wood Alcohol Poisoning and 'Substitutes.'"

Feb. 20—Dr. E. W. Taylor, "The History and Significance of the Mental Hygiene Movement."

Feb. 27—Dr. Charles J. White, "Care of the Skin."

Mar. 6—Dr. Lesley H. Spooner, "A Health Clinic: Its Purposes and Accomplishments."

Mar. 13—Dr. Freeman Allen, "Modern Methods in the Administration of Anesthetics."

Mar. 20—Dr. Paul Thorndike, "The Responsibility of the General Public in the Control of Venereal Diseases."

Mar. 27—Dr. Alexander Quackenboss, "Care of the Eyes."

PUBLIC BEQUESTS.—By the will of the late Mr. Joseph M. Herman, the sum of $10,000 is left in trust to Henry Solomon, to be used by him for the purpose of medical research and expended in connection with or through any existing hospital, medical school, or institution of learning, or by establishing a private laboratory.

The will of the late Miss Katherine E. Bullard included a bequest of $2,500 each to the Massachusetts General Hospital for a free bed, and to the Perkins Institution for the Blind. Upon the death of the last beneficiary, Harvard University will receive a sum to be used for the advancement of research in neurology.

The Peter Bent Brigham Hospital receives a bequest of $2500 by the will of the late Mr. John P. Reynolds of Boston.

Obituary.

HOWARD EDWIN SETTLE, M.D.

DR. HOWARD EDWIN SETTLE, of Boston, died at the Parker Hill Hospital on December 20, 1921, at the age of 29 years. His death was caused by appendicitis. Dr. Settle was born at Berne, Albany County, New York, the only child of Theodore and Kate Settle of Berne, N. Y. He received his medical degree from Harvard Medical School in 1916, and then served at the Peter Bent Brigham Hospital and the Boston City Hospital. Dr. Settle specialized in diseases of the eye, ear, nose and throat. During the war, he served as aural surgeon in the Navy from July, 1917, to April, 1919, and was stationed at New London, Conn., Newport News, Va., and Washington, D. C. He was retained by the Government as assistant surgeon in the Public Health Service, to examine men in the Army and Navy, and was transferred to Parker Hill Hospital for operation work on December 11, 1920. On January 1, 1920, he was appointed assistant to the ophthalmic surgeons of the Boston City Hospital. Dr. Settle was a member of the Massachusetts Medical Society and a Fellow of the American Medical Association. He is survived by his widow, who was Miss Frances Barber of Montepelier, Vt., and one child.

Miscellany.

THE DARDANELLES EXPEDITION.

IN a recent issue of *The British Medical Journal* has been published the following account of the medical arrangements of the Dardanelles expedition:

The medical arrangements were under the control of Surgeon-General Birrell from March 15th, 1915, to the later part of August, when he was succeeded by Surgeon-General Bedford. Surgeon-General Sir William Babtie was appointed Principal Director of Medical Services in the Mediterranean in May, 1915, and exercised general supervision over all the medical arrangements for the Mediterranean Expeditionary Force. Surgeon-General Birrell reached Alexandria on April 1st, 1915, but did not arrive at Mudros until April 18th, his representative in the interval being Lieut.-Colonel Keble. It is to the credit of Colonel Keble that he refused to accept an estimate of 3,000 casualties made by the general staff, and drew up a scheme of evacuation, subsequently endorsed by Surgeon-General Birrell, based upon an estimate of 10,000 casualties. The scheme provided for the accommodation of 1,995 serious cases on regular hospital ships, or, at a pinch, 2,409 cases, and for 7,300 not seriously wounded, or a grand total of 9,709. It appears that though at the time of the landing there was accommodation for the estimated number of serious cases in the hospital ships, the transports also allotted for the reception of wounded were not provided with the necessary appliances. The Commission is of opinion that in the actual circumstances of the landing the supply of hospital ships was insufficient, but the instructions given to Sir Ian Hamilton by the Secretary of State for War did not contemplate a landing, and therefore Surgeon-General Birrell had no opportunity of adapting his requirements to what actually happened. The Commission, however, thinks that if the administrative staff had accompanied General Head Quarters to Mudros the D. M. S. would have been in a better position to inform himself of the probable operations and to estimate the consequent requirements. Even when the intention to make a landing became known to him, however, he shared the assumption of the general staff that a considerable advance would be made, and that it would therefore be possible to collect and treat the wounded on shore. This expectation was not fulfilled.

Unfortunately the number of hospital ships, and even of hospital carriers, was very insufficient, and, owing partly to the difficulty of sorting cases, a large number of serious cases were taken to the transports (black ships), which were only equipped for light cases. The condition of the transports appears to have been

extremely bad for about a month after April 25th; many were very dirty and some were carrying horses. As it was impossible to land them the horses and the wounded travelled to Alexandria on the same ship. There was also great deficiency in the medical staff, and this seems to have continued, for it would appear that on June 29th the *Saturnia*, filled with wounded, had no medical officer until she was boarded on their own initiative by several. This story is denied, but the denial is not accepted by Sir Thomas Mackenzie. Here, as in many other parts, the report is difficult to follow. The general conclusions of the Commission are summarized in the following paragraphs:

23. The provisions for the evacuation of the wounded, especially in the matter of hospital ships, proved insufficient to meet the emergencies which actually arose. We think that, if the operations to be undertaken in landing on the peninsula had been considered before the expedition started and a general plan prepared, further provision of hospital ships might, and probably would, have been made.

24. We do not think that the Director of Medical Services, Surgeon-General Birrell, before leaving England had any opportunity of estimating the number of hospital ships required, as he did not know what operations were contemplated.

25. We think that the separation of the Administrative Staff, including the Deputy Adjutant-General and Director of Medical Services, from the rest of the Head Quarters Staff during the time immediately preceding the landing was a mistake, and that it would have been better if the Director of Medical Services had been kept more fully informed of the operations which were proposed. The time was very short in which to make preparations, and we doubt if it was then possible to obtain a sufficient number of hospital ships to accommodate the casualties which actually occurred. If Surgeon-General Birrell had been able to discuss matters with the General Staff he might have seen the necessity of, and been able to obtain, a fuller supply of appliances and equipment for the transports.

We think, however, that it would have been well if while in Egypt, where he was arranging for hospital accommodation on a large scale, he had made requisition for appliances such as would probably be required for even the less serious cases on the transports, such as bedpans, blankets, pillows, and clothing. We recognize, however, that at that time he was separated from General Head Quarters, and therefore not possessed of adequate information as to the intended operations.

26. The scheme of evacuation drawn up by the Director of Medical Services was based on an estimate of casualties which was approximately correct, and would probably have worked satisfactorily if the anticipation of a rapid advance after the landing had been fulfilled. The failure of the scheme was mainly due to the fact that no substantial advance was effected, and that no hospitals could therefore be established on the land. This necessitated the immediate evacuation by sea of all casualties without any possibilitiy of separating the serious cases from those of a slighter nature. The transports or black ships were therefore used for cases for which they were not intended, and for which they were not adequately staffed or equipped.

In these circumstances the greater part of the sufferings of the wounded in the first days after the landing seem to us to have been inevitable, but there appears to have been some want of organization in the control of the boats and barges carrying wounded to the hospital ships and transports, which occasioned delay in their embarkation.

27. For the dislocation of the arrangements for evacuation, owing to the non-fulfilment of the expectations of the military authorities, the Director of Medical Services cannot be held responsible. He could not do otherwise than be guided by the views entertained by the Commander-in-Chief, and conveyed to the latter's subordinates in the operation orders and instructions for the landings issued by General Head Quarters. It may, indeed, be contended that a prudent administrator, even though assured by superior military authority of the probability of success, would do well not to leave out of account the possibility of failure, but to be prepared alike for either contingency demands a flexibility of organization and an adaptability of resources which in war are seldom attainable.

28. After the first two or three weeks, until the heavy fighting in August, there was an improvement in the condition of the transports, though some of them continued to be unsatisfactory. The transports required close supervision, which was, however, much hampered by the want of means of communication between the several ships and the ships and shore.

29. The scheme for the evacuation of the wounded in the August operations was based upon an approximately correct estimate of casualties, and the supply of hospital ships was much larger than at the first landing. On the whole, this scheme worked well, though again there were cases in which the transports were not satisfactory, and the organizations for transferring the wounded to the ships was imperfect.

30. After the middle of May the evacuation was made more difficult by the presence of enemy submarines. The transports were then unable to come to the beaches, the wounded being conveyed to them on trawlers and minesweepers, some of which were not suitable for their accommodation.

31. The field ambulances and clearing stations were, on the whole, efficient, considering the great difficulties under which the work in them had to be done.

32. The executive work of the medical officers and staff of the Royal Army Medical Corps and the Dominion Forces, and of the physicians and surgeons who placed their services at the disposal of the War Office, was performed with great energy, courage, and skill under very trying conditions.

33. The supply of medicines and other medical requisites was, on the whole, adequate, though at times there was a shortage of some drugs at some places. The food also was on the whole satisfactory, but at times it was not possible to give the sick and wounded all the variety of food which was desired, and at times the supply of water was insufficient.

34. The difficulties under which the evacuation of the wounded was carried out, especially in the early part of the operations, were exceptional and not easily surmountable. We think that in some cases there was a want of organization and supervision. The Director of Medical Services, Surgeon-General Birrell, did his best; we are of opinion, however, that he was not equal to the task of grappling with the exceptional conditions which arose.

35. Great help was given by the naval surgeons on the transports as well as on the trawlers and sweepers, and they were always ready to do everything in their power. It was not, however, possible to employ them on the transports during their voyage to Alexandria or Malta, as they could not leave their ships for an indefinite time. The naval officers concerned in the evacuation of the wounded gave every assistance and rendered excellent service.

Sir Thomas Mackenzie, who signs the report, publishes also a supplementary report. Dealing with medical matters, he says that the arrangements for the transport of the wounded were in a very unsatisfactory state until August, 1915. He expresses the opinion that the medical side of the campaign had never been thought out. Treatment of the wounded on the Gallipoli peninsula was, he says, as satisfactory as circumstances permitted, but many of the complaints as to the transport of men to the ships and overseas were justifiable. Though the medical authorities were informed that the military authorities expected the Turks to be driven back, so that room could be made for establishing hospitals ashore, provision ought also to have been made for the contingency of failure. Hospital ships were insufficient; troopships had to be converted into carriers and ambulance vessels, and were insufficiently staffed. The medical personnel did their utmost, but some of the wounded men had to shift for themselves. On some of the black ships the wounded were exposed to the sun and heat, without food or drink, for sixty or seventy hours. There was a shortage of equipment and supplies, and the sanitary arrangements on the converted trawlers were lamentably deficient.

Correspondence.

MATERNITY AID.

Everett, Mass., Jan. 4, 1921.

Mr. Editor:—

The correction in the JOURNAL of December 30, 1920, referring to the statement of the writer of the editorial on Maternity Aid of August 5, 1920, which stated that "the women of Massachusetts stand about eight times as much chance of death from childbirth, if cared for by their own physicians or midwives, as do the women in the poorer parts of Boston under the care of careful but inexperienced students properly supervised by experts," amends this statement by saying, "that eight deaths should be added to the list of out-patients who died as a result of pregnancy and labor during a fifteen year period, making a mortality rate of 14, instead of 11, per 10,000 live births, as compared with a rate for the state of 38 in 1901 and of 84 in 1918." In the issue of August 26, Dr. Bateman questioned the fairness of comparing the 11 deaths per 10,000 live births, with the excessive death rate of 84, which was apparently influenced very largely by influenza. There is reason to suppose that the death rate was also increased in 1919 by the same cause. In the same issue Dr. Morgan pointed out that the maternal death rates in many parts of the state were not wholly hopeless, while Dr. Malone, in the issue of September 2, 1920, suggested that the robustness of some of the types of patients treated at the out-patient department of the hospital might help toward a favorable death rate. The recent correction made, whereby an addition of eight deaths improves the chances of the women of the state by 25%, leads the writer to question whether another revision might not discover more deaths which would improve the chances of life some 25% or 50% more. Lest the laity outside of Boston should entice the inexperienced students away because of their marked efficiency to the detriment of the medical schools and for the peace of mind of the prospective mothers living at a distance, and since most of your readers have neither the time nor the opportunity to see the printed reports of the Lying-In Hospital for the years 1901 to 1915, inclusive, the writer suggests that you publish the record of the hospital for the out-patient department as shown in the body of the reports, in three or five year periods, for the 15 years under consideration, giving the number of deaths and the cause of death, and whether they died at home, at the Lying-In Hospital, or at some other institution.

The writer's interpretation of the record shows 225 or more patients who needed more care than the inexperienced students could give them, who were cared for elsewhere, and that there were about 30 deaths. This would practically double the death rate as first stated. It would require some explanation to convince the writer that deaths from this group due to septicaemia, eclampsia, post-partum shock and post-partum hemorrhage should not be legitimately a part of the record if it is to be used as a measure of comparison with the whole state. If the writer is correct, the average death rate for the state for the period 1901 to 1915 was 47 per 10,000 live births. If this is used instead of the higher rate for 1918 of 84, in comparison with the doubled student rate of nearly 22, the students would appear to be some over twice as efficient. This seems to the writer the fairest comparison, in view of the fact that, following 1915, conditions were much modified by the war and influenza.

The printed reports of the Lying-In Hospital, published for 1917, 1918, and 1919, condensed the summary of the hospital work into a space of two pages for each year, so that the data for these years are

not at present easily obtainable by most physicians. If there is to be a full report of the hospital for the past three years printed soon, might not the comparison with the year 1918 be left until more is generally known, as we hope it will be, after the entire report and investigations of the Maternity Commission are printed in full? In view of the fact that the correction of December 30, 1920, is not signed, it seems fair to assume that if the editor of the JOURNAL was not the writer of the different articles under consideration, at least he is in agreement with the implied position, that the inexperienced students are still six times as efficient, when properly supervised by experts. The JOURNAL record so far has indicated no attempt to modify the measure of efficiency by introducing any of the factors that must always enter into the chances of life and death when comparing individuals or groups. The editorial writer chose the death record alone as the measure of comparison. The hospital record seems to show that for the fifteen year period at the Lying-In Hospital proper, the average death rate was 215 per 10,000 live births. Comparing this with the 14 per 10,000 live births of the students, the inexperienced students seem to be 15 times as efficient as the experts. The students being six times as efficient as the general practitioners and midwives, it logically follows that the general practitioners are two and one-half times as efficient as the experts.

The record of septicaemia is also worth considering. The out-patients are credited with five deaths from septicaemia for the entire fifteen year period, when 29,204 patients were cared for, or one death to 5,841 patients, or 1.71 to 10,000 live births. The hospital department, with 10,790 patients, had a record of 56 deaths from septicaemia, or 52 to 10,000 live births. Here the inexperienced students seem to be about 30 times as efficient in preventing septicaemia as the experts, and the practitioners of the whole state nearly five times as efficient as the experts. The hospital record for the five year period 1901 to 1905, shows 3172 patients and seven deaths from septicaemia, or one death to 453 patients. For the period 1906 to 1910, 4,093 patients with 21 septicaemia deaths, one death to 195 patients. For the period 1911 to 1915, 4,219 patients and 28 deaths from septicaemia or one death to 150.7 patients.

The writer has only one report of the Massachusetts Homeopathic Hospital at hand, that of 1915. The record shows that at the Maternity Department there were 1,117 live births, with 16 deaths of mothers. Of these, two died of septicaemia. The record at the Lying-In Hospital the same year was 850 live births, 16 deaths, seven being from septicaemia. The record seems to indicate that the Homeopathic Hospital was more efficient by 31%, but the writer is sure than any medical man of experience would admit the comparison was not a fair one after studying the cases cared for; but no such element has so far appeared to modify the dictum of August 5, 1920.

The writer entertains the hope that enough has been said to show that even such serious subjects as vital statistics need to be used, as Jeff would say, with "discression," and that however innocent the intent, statistics may work an injustice. The writer is not a statistician and, while an effort has been made to be mathematically accurate, he would not care to be condemned utterly if some slight errors might be found if looked for diligently. The experience gained by a summer course at the Boston Lying-In Hospital out-patient department in the early nineties, while an inexperienced student, as well as observation in hospital and private practice since, leads the writer to agree with Dr. Malone that many patients of foreign birth have a physical stamina that makes motherhood a much easier task and that they are often less susceptible to septic infection than many women of native stock. The number of deaths given in the state report for 1918 from puerperal fever for several of the larger mill cities, with a large proportion of foreign mothers, seems to suggest the same conclusion.

There is certainly evidence that maternal mortality has increased very markedly since the beginning of the war and the advent of the influenza in 1918. It certainly is the duty of every medical man to help investigate at least so much of the record as comes within his own field of observation or work. On general principles, it does not seem reasonable to assume that the general practitioners of the state have suddenly become only half as efficient as formerly within the past few years. The record of the Boston Lying-In Hospital showed an increase of 300% in the deaths from septicaemia for the period 1911 to 1915 as compared with the period 1901 to 1905. We do not recall that there was any warning editorial in the JOURNAL, or that there was any public demand that the institution should be managed by the State Board of Health.

The writer does not wish to be understood as trying to discredit in any way the excellent record of the Lying-In Hospital in all its departments, nor to attribute any unfair intentions on the part of the editorial writer of the JOURNAL. But he does think that the editorials referred to are a good illustration of much of the propaganda that has been used in recent years to advance legislative health measures. The data often submitted and later quoted contain considerable fiction and the application is often unfair. The "correction" article states that the error referred to was made through misinformation, which was published August 5 and September 9, 1920, and it was accepted in good faith by most of us until December 30, 1920.

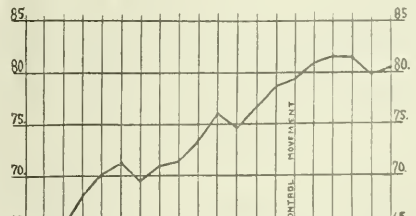
The world today is overcharged with misinformation and undoubtedly misinformation of some kind contributed toward the death of many of the 804 maternal deaths in Massachusetts in 1918.

GEO. E. WHITEHILL, M.D.

THE INTERPRETATION OF CANCER STATISTICS

Mr. Editor:—

If the figures of the cancer death rate, as quoted by Dr. Little in the December 23 issue of the JOURNAL, are represented graphically, it will be seen that the curve from 1914 to 1919 is of a distinctly different character from the curve for the preceding years, or for any other six year period thereof.



Again, if we average the cancer death rates for three year periods from 1902 to 1919, we find still less cause for discouragement.

1902–1904, inclusive	67.87
1905–1907, inclusive	70.47
1908–1910, inclusive	73.83
1911–1913, inclusive	76.73
1914–1916, inclusive	80.29
1917–1919, inclusive	80.24

Three hundred and sixty-five days is, after all, an arbitrary unit of time, and in a disease the duration of which is usually much longer than a year, a period of one thousand and ninety five days is at least as good an indication of the direction in which the tide is running.

From both of these viewpoints we see a change in the cancer death rates as reported, beginning about 1914. Oddly enough, cancer control work was started on a relatively large scale at about this time. The cancer control enthusiast should not be permitted to claim, *post hoc propter hoc*, that his propaganda is beginning to bear fruit, for he has not yet covered the territory from which the statistics have been gathered. He may be very much encouraged to continue his work, however.

Another explanation of the change since 1914 is that we are reaching a point of diminishing returns in our ability to diagnose cancer—which is also most encouraging.

Dr. Little says, after discussing these figures: "Because the truth is not evident, is no excuse at all for holding to and advocating a proven untruth." I do not claim that the results of the surgical treatment of cancer and precancerous conditions demonstrate a "proven truth," but I do claim that they do not demonstrate a "proven untruth" and that at least they are certainly not discouraging.

In one of his last articles, speaking of pneumonia and cancer, Sir William Osler said: " . . . we need a stern, iconoclastic spirit which leads, not to nihilism, but to scepticism—not the passive scepticism born of dispair, but the active scepticism born of a knowledge that recognizes its limitations and knows full well that only in this attitude of mind can true progress be made."

I am respectfully yours,

DWIGHT O'HARA.

751 Main Street, Waltham, Mass.

"A MEER DULL PHYSICIAN."

31 Massachusetts Avenue, Boston,
December 30, 1920.

Mr. Editor:—

The following essay is from "Microcosmography, or a Piece of the World Discovered, in Essays and Characters," by John Earle, D.D., of Christ Church and Merton Colleges, Oxford, and Bishop of Salisbury, London, 1628.

The essays are among the first character studies in the English language. In other essays, depicting the alderman, the lawyer and the shopman, the author uses the same trenchant pen, which fact may mitigate our grief in reading of the light esteem in which the early seventeenth century physician was held.

A MEER DULL PHYSICIAN.

"His practice is some business at bedsides, and his speculation an urinal; he is distinguished from an empiric, by a round velvet cap and doctors gown, yet no man takes degrees more superfluously, for he is doctor howsoever. He is sworn to Galen and Hippocrates, as university men to their statutes, though they never saw them, and his discourse is all aphorisms, though his reading be only Alexis of Piedmont or the Regiment of Health. The best cure he has done, is upon his own purse, which from a lean sickliness he hath made lusty, and in flesh. His learning consists much in reckoning up the hard names of diseases, and in the superscriptions of gally-pots in his apothecary's shop, which are ranked in his shelves and the doctor's memory. He is, indeed, only languaged in diseases, and speaks Greek many times, when he knows not. If he have been but a bystander to some desperate recovery, he is slandered with it, though he be guiltless, and this breeds his reputation, and that his practice, for his skill is merely opinion.

"Of all the odors he likes best the smell of urine, and holds Vespasion's* rule, that no gain is unsavory. If you send this once to him, you must resolve to be sick however, for he will never leave examining your water, until he has shaked it into a disease; then follows a writ to his drugger in a strange tongue, which he understands, though he cannot conster.

"If he see you himself, his presence is the worst visitation; for if he cannot heal your sickness, he will be sure to help it. He translates his apothecary's shop into your chamber, and the very windows and benches must take physic. He tells you your malady in Greek, though it be but a cold, or headache, which by good endeavor and diligence he may bring to some moment indeed.

"His most unfaithful act is, that he leaves men gasping, and his pretence is, death and he have a quarrel and must not meet, but his fear is, least the carkass should bleed. Anatomies and other spectacles of mortality, have hardened him, and he is no more struck with a funeral than a grave maker. Noblemen use him for a director of their stomach, and ladies for wantonness, especially if he be a proper mann. If he is single, he is in league with his she apothecary, and because it is the physician, the husband is patient. If he have leisure to be idle, (that is to study), he has a smatch at alcumy and is sick of the philosophers stone, a disease uncurable but by an abundant phlebotomy of the purse. His two main opposites are a mountebank and a good woman, and he never shews his learning so much as in an invective against them and their boxes. In conclusion, he is a sucking consumption, and a very brother to the worms, for they are both ingendered out of man's corruption."

Dr. Earle has a similar essay on the surgeon, to whom he pays his respects in a no less flattering manner.

Very truly yours,

WILLIAM PEARCE COUES, M.D.

* The Roman emperor Vespasian ordered a tax on urine.

SOCIETY NOTICES.

HARVARD MEDICAL SOCIETY.—Next meeting in the Peter Bent Brigham Hospital Amphitheatre (Van Dyke Street entrance), Tuesday evening, February 1, at 8.15 o'clock.

PROGRAM.

1. Mechanism and Uses of Hypertonic Salt Solution in Conditions of Increased Intercranial Tension. Drs. Frederick E. B. Foley and Percival Bailey.
2. Tetany Following Forced Respirations. Dr. Samuel B. Grant.

Medical students and physicians are cordially invited to attend.

CYRUS C. STURGIS, *Secretary.*

BOSTON CITY HOSPITAL.—Cheever Amphitheatre, Staff Clinical Meeting, Friday, Feb. 4, 1921, 8.15 P.M.
Topic: X-Ray Collation.

1. X-Ray Interpretations of Diseases of the Lungs. Dr. S. Ellsworth.
2. Interpretations of Radiographic X-Ray Examinations. Dr. G. W. Holmes.
3. X-Ray Application in G.-U. Examinations. Dr. L. B. Morrison.
4. The Upper Right Quadrant. Dr. A. W. George.
5. The Lower Right Quadrant. Dr. P. Butler.
6. X-Ray Therapeusis. Dr. H. Osgood.

Each speaker will have 15 minutes for the presentation of his views. Open discussion. Physicians and medical students invited.

DR. HALSEY B. LODER,
DR. H. ARCHIBALD NISSEN,
Committee.

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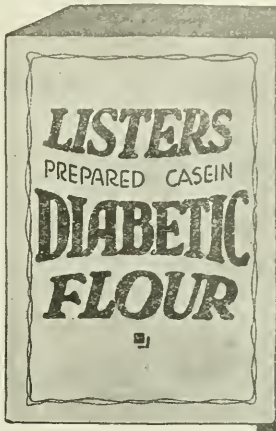

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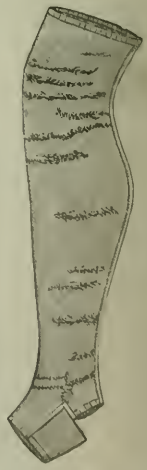

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